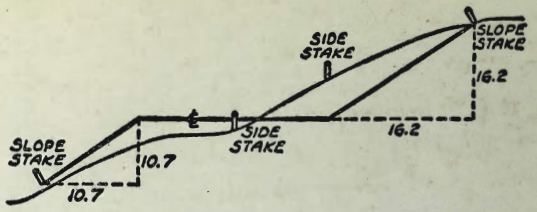


Distances from Side Stakes for Cross-Sectioning

Slope 1 to 1. Roadway of Any Width

	0	.1	.2	.3	.4	.5	.6	.7	.8	9	
0	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0
1	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	1
2	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	2
3	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	3
4	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	4
5	5.00	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	5
6	6.00	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	6
7	7.00	7.10	7.20	7.30	7.40	7.50	7.60	7.70	7.80	7.90	7
8	8.00	8.10	8.20	8.30	8.40	8.50	8.60	8.70	8.80	8.90	8
9	9.00	9.10	9.20	9.30	9.40	9.50	9.60	9.70	9.80	9.90	9
10	10.00	10.10	10.20	10.30	10.40	10.50	10.60	10.70	10.80	10.90	10
11	11.00	11.10	11.20	11.30	11.40	11.50	11.60	11.70	11.80	11.90	11
12	12.00	12.10	12.20	12.30	12.40	12.50	12.60	12.70	12.80	12.90	12
13	13.00	13.10	13.20	13.30	13.40	13.50	13.60	13.70	13.80	13.90	13
14	14.00	14.10	14.20	14.30	14.40	14.50	14.60	14.70	14.80	14.90	14
15	15.00	15.10	15.20	15.30	15.40	15.50	15.60	15.70	15.80	15.90	15
16	16.00	16.10	16.20	16.30	16.40	16.50	16.60	16.70	16.80	16.90	16
17	17.00	17.10	17.20	17.30	17.40	17.50	17.60	17.70	17.80	17.90	17
18	18.00	18.10	18.20	18.30	18.40	18.50	18.60	18.70	18.80	18.90	18
19	19.00	19.10	19.20	19.30	19.40	19.50	19.60	19.70	19.80	19.90	19
20	20.00	20.10	20.20	20.30	20.40	20.50	20.60	20.70	20.80	20.90	20
21	21.00	21.10	21.20	21.30	21.40	21.50	21.60	21.70	21.80	21.90	21
22	22.00	22.10	22.20	22.30	22.40	22.50	22.60	22.70	22.80	22.90	22
23	23.00	23.10	23.20	23.30	23.40	23.50	23.60	23.70	23.80	23.90	23
24	24.00	24.10	24.20	24.30	24.40	24.50	24.60	24.70	24.80	24.90	24
25	25.00	25.10	25.20	25.30	25.40	25.50	25.60	25.70	25.80	25.90	25
26	26.00	26.10	26.20	26.30	26.40	26.50	26.60	26.70	26.80	26.90	26
27	27.00	27.10	27.20	27.30	27.40	27.50	27.60	27.70	27.80	27.90	27
28	28.00	28.10	28.20	28.30	28.40	28.50	28.60	28.70	28.80	28.90	28
29	29.00	29.10	29.20	29.30	29.40	29.50	29.60	29.70	29.80	29.90	29
30	30.00	30.10	30.20	30.30	30.40	30.50	30.60	30.70	30.80	30.90	30
31	31.00	31.10	31.20	31.30	31.40	31.50	31.60	31.70	31.80	31.90	31
32	32.00	32.10	32.20	32.30	32.40	32.50	32.60	32.70	32.80	32.90	32
33	33.00	33.10	33.20	33.30	33.40	33.50	33.60	33.70	33.80	33.90	33
34	34.00	34.10	34.20	34.30	34.40	34.50	34.60	34.70	34.80	34.90	34
35	35.00	35.10	35.20	35.30	35.40	35.50	35.60	35.70	35.80	35.90	35
36	36.00	36.10	36.20	36.30	36.40	36.50	36.60	36.70	36.80	36.90	36
37	37.00	37.10	37.20	37.30	37.40	37.50	37.60	37.70	37.80	37.90	37
38	38.00	38.10	38.20	38.30	38.40	38.50	38.60	38.70	38.80	38.90	38
39	39.00	39.10	39.20	39.30	39.40	39.50	39.60	39.70	39.80	39.90	39
40	40.00	40.10	40.20	40.30	40.40	40.50	40.60	40.70	40.80	40.90	40
41	41.00	41.10	41.20	41.30	41.40	41.50	41.60	41.70	41.80	41.90	41
42	42.00	42.10	42.20	42.30	42.40	42.50	42.60	42.70	42.80	42.90	42
43	43.00	43.10	43.20	43.30	43.40	43.50	43.60	43.70	43.80	43.90	43
44	44.00	44.10	44.20	44.30	44.40	44.50	44.60	44.70	44.80	44.90	44
45	45.00	45.10	45.20	45.30	45.40	45.50	45.60	45.70	45.80	45.90	45
46	46.00	46.10	46.20	46.30	46.40	46.50	46.60	46.70	46.80	46.90	46
47	47.00	47.10	47.20	47.30	47.40	47.50	47.60	47.70	47.80	47.90	47
48	48.00	48.10	48.20	48.30	48.40	48.50	48.60	48.70	48.80	48.90	48
49	49.00	49.10	49.20	49.30	49.40	49.50	49.60	49.70	49.80	49.90	49
50	50.00	50.10	50.20	50.30	50.40	50.50	50.60	50.70	50.80	50.90	50

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

G-405

IMPROVED TABLES
AND
INFORMATION

TABLE XIII—CORRECTIONS FOR TANGENTS AND EXTERNALS

These corrections are to be added to the approximate values, found by dividing the tangent, or external, for a 1° curve (Table VIII) by the degree of curve, in order to obtain the true tangents, or externals. Intermediate values may be obtained by interpolation.

FOR TANGENTS ADD

Central Angle	Degree of Curve													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	03	.06	09	13	16	19	.22	.25	.28	.31	34	38	42	.46
15°	04	10	14	19	24	.29	.34	.39	45	.51	.53	58	.63	.68
20°	06	.13	19	.26	.32	.39	.45	.51	.58	.65	.72	79	.84	.90
25°	.08	16	24	.33	40	49	.58	67	.75	.83	90	.99	1.06	1.14
30°	10	19	.29	39	49	.59	.69	79	.89	.99	1.09	1.20	1.29	1.39
35°	11	22	.34	47	.58	.69	.70	.81	.92	1.04	1.29	1.42	1.54	1.66
40°	13	.26	.40	.53	.67	.80	.93	1.06	1.20	1.34	1.49	1.64	1.79	1.94
45°	15	.30	44	60	76	91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21
50°	17	.34	.51	.68	.85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48
55°	19	38	.57	76	.95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77
60°	21	42	.63	.84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07
65°	23	46	.69	.93	1.16	1 40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39
70°	25	.51	76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72
75°	.27	.56	.83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09
80°	30	.61	.91	1.22	1.53	1.84	2.15	2.46	2 78	3.10	3.44	3.78	4.12	4.46
85°	33	66	1.00	1.33	1.68	2.02	2.36	2 70	3.05	3.40	3.77	4.14	4.55	4 89
90°	36	.72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4 10	4 50	4.91	5.32
95°	39	79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.40	4.98	5.38	5.83
100°	43	.86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34
110°	51	1.03	1.56	2.08	2.61	3.14	3.67	4.21	4 76	5.31	5 86	6.43	7 01	7 60
120°	62	1.25	1 93	2.52	3.16	3.81	4 45	5.11	5.77	6 44	7 12	7.80	8.50	9 22

FOR EXTERNALS ADD

Central Angle	Degree of Curve													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020
15°	.003	.007	.010	.014	.018	.023	.027	.029	.032	.035	.039	.043	.047	.051
20°	.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083
25°	.009	.018	.027	036	.046	.056	.065	.074	.083	.093	.106	120	127	135
30°	.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188
35°	.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264
40°	.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341
45°	.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445
50°	.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550
55°	.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700
60°	.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851
65°	.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.711	.845	.922	1.01
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17
75°	.095	.182	.286	.383	.480	.578	.678	.777	.877	.977	1.07	1.18	1.29	1.39
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20
95°	.174	.350	.522	.706	.985	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32

INDEX:

ENCANTO SEW'S:
(W.O. 33043)

INDEX: (CONT.)

INDEX (CONT.)

ENCANTO SEWERS: W.O. 33043

CLARK
STEFFENS
ABRENILLA
ANDERSON

9-23-60
W.O. 33043

BRDWAY: (ESMT; W'LY)
(4+50 to 9+50)

6+50	9.96%	314.95 307.33 C 7.62
6+00		310.46 302.50 C 7.96
5+50	(NAILS @ 5' + 10' O/S RT)	306.30 297.67 C 8.63
5+00		303.38 292.83 C 10.55

Note: at cont's: request offsetts changed to 8' + 16' RT at 90° E ESMT.

4+50 Brdwy = Drop M.H. #164 (= 4+96.64 N'ly - S'ly ESMT	299.94 288.00 W'ly C 11.94	299.94 273.80 N'ly C 26.14
NAILS 7.07' & 15' RT on Split Δ (NE'ly quad)		299.94 273.30 S'ly C 26.64

ORIG. T.B.M. 301.19 = ℄ P.K. M.H. #164

SET T.B.M. = P.K. NAIL Pole #685871-H = 301.02
S'ly Brdway + E'ly of ESMT.

Brdwy (Cont.)

Chk:	332.80	= 332.85 = ℄ L+T 63' Hd & Brdway
9+50 = D. END (Plug)	341.29 326.80 C 14.49	
9+00	337.50 324.35 C 13.15	
8+50	4.9% ↓ 333.00 321.90 C 11.10	
8+00	328.48 319.45 C 9.03	
7+50 = M.H #171	323.94 317.00 C 6.94	
7+00	319.43 312.17 C 7.26	

KlAUBER : Brdway N'ly

335.35 = NE'ly 16' Chk - Tie to ℄ L+T Wren & KLAUBER

STA:	CHK:		
3+03.50 = M.H #151			38.21 330.37 C 7.84
2+50			33.80 326.52 C 7.28
2+00	(Chk's 5' RT ℄)	7.19% ↓	30.00 322.93 C 7.07
1+50			26.33 319.33 C 7.00
1+15.5 = CONNECT EXIST.			323.72 316.85 (DWG.) C 6.87

Note: 0+00 = EXIST M.H 256.56 SW'ly of ℄ WREN

T.B.M. 314.16 = L+T ℄ KLAUBER ℄ 63'Rd (P.I.)

STA:		
6+00		61.21 355.02 C 6.19
5+50		58.22 350.86 C 7.36
5+00	0.313% ↓	54.89 346.70 C 8.19
4+50		50.77 342.55 C 8.22
4+00		46.50 338.39 C 8.11
3+50		42.27 334.24 C 8.03

KIAUBER (CONT.)

chk:
STA:

371.29 = NE'Ly Chx -16' tie
ELtT. SPARROW &
KIAUBER

8+50
70.12
362.33
C 7.79

8+00
69.08
360.95
C 8.13

2.772%

7+50
67.72
359.56
C 8.16

7+00
66.05
358.18
C 7.87

6+50
63.85
356.79
C 7.06

6+07 = M.H #152
61.63
355.60
C 6.03

STA:

11+00
79.97
370.56
C 9.41

10+50
77.84
368.83
C 9.01

3.45%

10+00
75.67
367.11
C 8.56

9+50
73.39
365.38
C 8.01

9+10 = M.H #153
71.68
364.00
C 7.68

9+00
71.30
363.72
C 7.58

KLAUBER (CONT.)

384.58 = 26' chx tie (w'ly) to P.I (℄ m.H) 12+14.38

Chk: STA:		
13+00		88.79 381.42 C 7.37
	↓ 7.51%	
12+50		86.07 377.67 C 8.40
Note: Δ LT = 60°43'		
CONT. TANG. Sew 47.57' ahead to D.END & BITTERN =	84.36 375.48 elev. C 8.88	84.75 375.00 C 9.75 (IN) to N'ly
12+14.38 = M.H # 154	(diff. Elev. S'ly–N'ly)	84.75 374.50 C 10.25 (OUT) to S'ly
12+00	↓ 3.45%	84.39 374.01 C 10.38
11+50		82.20 372.28 C 9.92

STA:		
16+00		12.39 402.76 C 9.63
15+50	↓ 6.68%	408.00 399.42 C 8.58
15+00		403.81 396.08 C 7.73
14+55 = M.H # 155	5% on ch's 5' rt	400.25 393.07 C 7.18
14+00	5.05%	395.80 388.93 C 6.87
13+50		92.10 385.18 C 6.92

KLAUBER (CONT.)

STA:		Chk:	
18+00	25.81 409.61 C 16.20		P.K. # 428.95 = NAIL Pole JP171024 APPROX. STA 17+40 RT
(17+69 = Beg CONC. BK-FILL)			
		(17+07.81 = ℄ L+T = P.O.T. ℄ KLAUBER)	
17+65	24.16 409.47 C 14.69		
17+51.5 = Chimney LT.			
17+30	22.12 409.33 C 12.79	18+96.47 = D.END = end CONC.-BK-FILL	28.85 410.00 18.85
		18+70	28.14 409.89 C 18.25
16+96.47 = M.P. #156 Δ = 29° 03' RT. SET Chx 5.16' & 15' RT ON SPLIT	19.86 409.20 C 10.66		
		18+35	27.08 409.75 C 17.33
16+50	16.40 406.10 C 10.30		

W.O. 33043
10-6-60
CLARK
WILLIAMS
ABRENILLA
ANDERSON

E'Smt Sew: M.H #53 = STA:
26+09.9 RADIO DR, N'Ly to
City BDRY

1+15.35 =
18.08
205.78
C 12.30

0+75.35
6' LT. ℄
3.0%
17.73
204.57
C 13.16

Stubs

0+35.35
14.74
203.36
C 11.38

216.93 = TP

0+00 =
M.H #53
= STA: 26+09.9
RADIO DR.
(Note: RADIO DR Sew. 0+00 to
T.B.M

out 201.79
C 10.61

60'th Staked by
209.64 = 50' E'Ly

20229 IN
C 10.11

Ref: 6342-D: Profile
6328-D

4+05.35
22.25
214.86
C 7.39

3+55.35
19.36
213.29
C 6.07

3+05.35
16.99
211.72
C 5.27

3.1%

2+55.35
15.49
210.14
C 5.35

2+05.35
14.84
208.57
C 6.27

Δ = 18° 01' 14" RT

1+55.35 = M.H #1
Stubs 6.08 & 15 LT ℄
ON SPLIT.
16.48
207.00
C 9.48

C.H.S.)

R.P M.H #53 (City {grade notes: by C.H.S.)

ESMT (CONT.)

7+05.35
33.59
223.71
C 9.88

6+55.35
32.33
222.29
C 10.04

2.85% ↓

6+05.35
31.35
220.86
C 10.49

5+55.35
29.65
219.43
C 10.22

Δ = 15° 54' RT

5+05.35 = M.H #2
Stubs set 6.06' & 15' 2 Tg M.H ON SPLIT

28.40 = TP
218.00
C 10.40

4+55.35
26.03
216.43
C 9.60

9+55.35
41.24
232.57
C 8.61

4.57% ↓

9+05.35
40.76
230.28
C 10.48

Δ = 1° 12' 00" LT

8+55.35 = M.H #3
Stubs 6' & 15' LT ℄ ON SPLIT

38.83
228.00
C 10.83

8+05.35
36.27
226.57
C 9.70

7+55.35
34.61
225.14
C 9.41

ESM'T (CONT.)
N'LY RADIO DR - W'LY 60'th

Chk: 255.77 = 255.55 = 1X1 =
50' W'LY R.P.
STA: 11+06.86
G.B. 399-48

to 60'th
= 0+00 ESM'T ahead } grade Book 399-48

±
11+06.86 = CONNECT. 48.69
to EXIST. SEW. 239.50
@ CITY BDRY C C 9.19 ±

10+55.35 46.30
237.14
C 9.16

4.57%

10+05.35 44.07
234.85
C 9.22

CLARK
WILLIAMS
ABRENILLA
ANDERSON
10-10-60

M.H # 56 (RADIO-DR. 32+32.92)
N'Ly ON 60'th & E'Ly, WEAVER
to D-END

STA:

2+14.16 — 289.17 / 274.92 / C 14.25

22.51 5°

1+64.16 — 76.95 / 263.67 / C 13.28

P.O.T.
1+31.89 = M.H # 88 — 267.61 / 256.40 / C 11.21

Stubs 6' RT. 25.47 6°

1+00 — 58.52 / 248.28 / C 10.24

0+50 — 45.59 / 235.54 / C 10.03

0+00 60'th & WEAVER = M.H # 56 RADIO (STA: 32+32.92 (Set by C.H.S.) — 222.80

T.B.M. — 228.55 = Chk

REF: 6322-D
DWG: 6344-D
6348-D

WEAVER: (CONT.) 60'th, NE'Ly

Chk:

294.68 = 56' SE'Ly R.P.
Chk (Fir & Streets) TP
CONC. RET. WALL - 60'th & WEAVER

4+14.16 — 302.15 / 295.98 / C 6.17

5°

3+64.16 — 99.51 / 292.88 / C 6.69

6.200

Stubs 6' RT.

10°

3+14.16 — 98.10 / 289.78 / C 8.32

5°

295.53 / 286.68 / C 8.85 IN

Δ = 49° 20' RT

-2+64.16 = M.H # 26 — 295.53 / 286.18 / C 9.35 OUT

Stubs 6.60' & 15' RT (ON SPLIT Δ)

N'Ly end, E'Ly hd wall - Culvert 60'th & RADIO DR.

WEAVER (60'th NE¼ to D. END)
CONT.

STA:		
7+00	2.89 4/5	18.36 310.86 C 7.50
6+50		15.72 309.42 C 6.30
P.O.T — 6+14.16 = M.H #25 stubs 6+15 RT & ℄		14.26 308.38 = F.L. C 5.88
5+64.16	6.2 0/0	11.80 305.28 C 6.52
5+14.16		308.67 302.18 C 6.49
4+64.16		305.29 299.08 C 6.21

Chk:

note 2 pks cut shots to here

328.35 = NAIL Pole # P-370422

A = 26° 30' 31" LT.

— 9+22.24 = M.H #24 stubs set 6.16' RT & 15' RT — on split —		22.91 317.30 = F.L. C 5.61
9+00		22 56 316.65 C 5.91
8+50	2.89 4/5	22.01 315.20 C 6.81
8+00		22.05 313.75 C 8.30
7+50		3 20 13 312.31 C 7.82

WEAVER (60'th NE'ly)
CONT.

STA:

11+50
32.50
325.00
C7.50

3.76 x 6

11+00
30.93
323.12
C7.81

Δ = 27° 11' 41" LT.

— 10+70.35 = M.H #23
stubs 6.17' & 15' RT
ON SPLIT

29.73
322.00 = F.L
C7.73

10+50
28.75
321.35
C7.40

3.17 x 6

10+00
26.20
319.76
C6.44

9+50
323.95
318.18
C5.71

CHK: 349.23 = 349.22 = W'ly 63' chx tie to Prop. Ec.

14+00
43.98
336.02
C7.96

3.17 x 6

13+50
40.60
333.13
C7.47

Δ = 18° 01' 55" RT.

— 13+20.09 = M.H #22
stubs 6.08' & 15' RT
ON SPLIT

39.18
331.40 = F.L
C7.78

13+00
38.02
330.65
C7.37

3.76 x 6

12+50
35.83
328.76
C7.07

12+00
33.97
326.88
C7.09

WEAVER (NE'ly 60'th to D-end) (cont.)

CHK:

16+50
61.87
352.74
C 9.13

16+00
59.54
349.11
C 10.43

15+50
55.63
345.48
C 10.15

53.60
344.00 (IN)
C 9.60

A = 8° 13' 52" LT

53.60
343.50 (OUT)
C 10.10

15+29.59 = M.H #21
(=0+00 Republic)
(See pg
Stubs 6.02' +15' RT
ON SPLIT

out - Sheets turned in

note: = end Sewer: WEAVER (60'th NE'ly to D-END)

15+00
50.88
341.80
C 9.08

14+50
46.97
338.91
C 8.06

16+94.84 = D.END
Stub 6' RT

62.53
356.00
C 6.53

10-17-60

BURIAN: (RADIO-Dr) (NE'ly to M.H #90)

Ref.: {6322-D {6351-D

STA:		
0+52=E.V.C.		82.52 267.40 C15.12
0+42		81.74 266.47 C15.27
0+32	stubs 6' RT ℄	80.90 265.77 C15.13
0+22		88.30 265.12 C15.18
0+12		79.15 264.70 C15.05
		264.40 (IN)
0+00 BURIAN = M.H #60 (= 44+53.65 RADIO-Dr)		263.90 (out)
(See cut-sheets C.H.S)		

STA:		
3+50		10.06 303.36 C6.70
3+00	13.48%	05.29 296.62 C8.67
2+50		3 00.25 289.88 C10.37
Δ=39°52' RT 2+22.72 = M.H #89 stubs 6.38 & 15' RT ON SPLIT Δ		97.69 286.20 C11.49
2+00		95.76 283.68 C12.08
1+50	11.01%	91.39 278.18 C13.21
1+00		86.73 272.68 C14.05

T.B.M 280.42 = P.K NAIL: 18' SL'y R.P. to M.H 60 & ℄ RADIO-Dr. Pole # 178289 X

cut-Sheets turned in

Note:- end BURIAN (RADIO-DR N'Ly)

4+66.07 = M.H # 90
Stubs 6'+15' RT &

325.65
319.00 = F.L
C6.65

4+50

22.97
316.84
C6.13

4+00

15.91
310.10
C5.81

10-21-60

WINNETT: (RADIO-Dr, N'Ly to D-END)

STA:		
2+00		307.71 301.26 C6.45
1+50	Stubs & nails on 6' RT	304.75 297.37 C7.38
1+00	← 7.776%	302.00 293.48 C8.52
0+50		299.85 289.59 C10.26
0+00 = M.H #65 (= STA: 59+22.76 Ahd RADIO Dr) (See cut sheet #11 RADIO-Dr.)		285.70 (IN) Winnett 285.20 (out)
T.B.M		297.26 = Ch☐ WALK 72± SE'Ly ℄ RADIO-Dr & WINNETT

Ref: DWG: {6338-D, 6355-D}

@ #1644 Winnett 16
Chx Con Porch
325.56 = 81' SW'Ly

STA:		Chk	
P.O.T. 4+18.19 = M.H #147 (= 0+00 SPRINGFIELD, E'Ly) Stubs 6' & 12' RT		(IN) ~~23.25 314.50 C8.75~~ (OUT) ~~23.25 314.00 C9.25~~ K'od by Contractor	323.08 314.50 F.L C8.58 323.08 314.00 F.L C9.08
4+00		321.44 312.95 C8.49	
3+50		317.17 310.08 C7.09	
3+00	← 5.753%	314.11 307.20 C6.91	
2+50		310.78 304.32 C6.46	
Δ = 3° 15.6' LT. 2+09.62 = M.H #146 Stubs 6' & 12' RT. on split		308.30 302.00 C6.30	F.L.

WINNETT (CONT'D)
RADIO-DP, N'LY

STA:		
7+03.69 = Chimney, RT.		
7+00	43.87 330.53 C13.34	43.87 332.93 10.94
6+50	40 10 327.68 C12.42	40.10 329.66 C10.44
6+00	36 54 324.84 C11.70	36.54 326.39 C10.15
5+50	33.10 322.00 C11.10	33.10 323.12 C9.98
5+00	29 43 319.15 C10.28	29.43 319.85 C9.58
4+50	25 90 316.30 C9.60	25.90 316.58 C9.32

5.68%
6.543% Adjusted Grade From STA = 147 to 148

STA:	
10+00	66 33 354.00 C12.33 C9.33
9+50	63 31 349.77 C13.54 C10.54
9+25.69 = Chimney RT.	
9+00	60 59 345.55 C15.04 C12.04
8+50	56 50 341.32 C15.18 C12.18
8+14.69 = chimney on RT.	
8+00	52 01 337.09 C14.92 C11.92
P.O.T.	49.52 337.40 C12.12
7+68.19 = M.H #148	49.52 334.40 F.L. C15.12
7+50	47.92 47.92 333.36 336.20 C14.56 C11.72

8.45%

WINNETT (CONT.)
RADIO-DR., N'LY

STA:	CHK:	414.50 = 414.57 = NEBP WINNETT & Tooley	
12+08.29 = Plug-end		84.75 373.76 C10.99	F.L. C7.99
12+00	10.83%	83.84 372.86 C10.98	C7.98
11+50		78.47 367.44 C11.03	C8.03
P.O.T. 11+18.19 = M.H #149		75.63 364.00 C11.63	F.L. C8.63
11+00		74.11 362.46 C11.65	C8.65
10+50		69.99 358.23 C11.76	C8.76
10+36.69 = Chimny RT.			

WINNETT:
RADIO DR. S'LY

Ref: DWG: 6324-D, 6355-D

STA:		
1+71.06		304.79 298.56 C6.23
1+61.06 = B.V.C.		303.22 297.62 C5.60
1+50	7.40%	301.97 296.80 C5.17
1+00	Stubs 6' RT	297.91 293.00 C4.91
0+50		297.42 289.40 C8.02
0+00 = M.H #65 (See Pg. 16) RADIO-DR.		285.70 (IN)
T.B.M. (See Pg 16)		= 297.26

WINNETT (CONT.)
(RADIO Dr - S'Zy)

STA:

3+00

30.50
322.97
C 7.53

23.49 Rt

2+60

21.81
313.57
C 8.24

Δ = 2° 54' 29" Rt.

2+43.09 = M.H #145

318.39
309.60
C 8.79

stubs 6' & 12' RT

18.39
Tp M.H = 317.60
C 0.79 Tp

16.93 Rt

2+01.06 = E.V.C.

310.10
302.49
C 7.61

stubs 6' Lt & E

1+91.06

308.19
300.99
C 7.20

1+81.06

306.64
299.68
C 6.96

T.B.M = 317.71 = NAIL Pole #170380
St. Sta 2+37 WINNETT (Rt.)

STA:

5+00

77.75
366.32
C 11.43

20.68 Rt

4+60

69.27
358.30
C 10.97

4+20

59.79
350.28
C 9.51

P.O.T

3+93.76 = M.H #144

53.36
345.00 = F.L
C 8.36

53.36
352.90 = Tp M.H
C 0.46

3+80

50.02
341.77
C 8.25

3+40

30.06
322.37
C 7.69

WINNETT (CONT.)
(RADIO-DR, S'LY)

STA:

CHK: 395.85 = P.K. NAIL Pole #652478-H Approx 80' I SELY SE Corn WINNETT + SCIMITAR

STA.		
		90.31 377.00 (IN) C13.31
See Also: SCIMITAR (MAP. STA.: M.H. LAYS 1' S'LY OF MAP LOC. FOR closure SCIMITAR) 6+35.07 = M.H. #115 stubs 6'+12' RT @ 90°	90.31 390.20 = TP M.H. C0.11	390.31 376.50 (out) C13.81
5+89.41 = (make this mid-pt. bet. M.H.'s)	1.0% ↓	88.24 376.04 C12.20
		85.64 375.59 (IN) C10.05
5+43.76 = M.H. #143 (Stubs 5'+10' @ 90° to ℄ EIDER ON RT EIDER Sew. ℄)	85.64 386.00 = TP M.H. F0.36	85.64 375.09 (OUT.) C10.55

ATTIX:
(RADIO-DR S'LY)

STA: TBM = 346.53 = 30' N'LY chx Tie to ℄ ATTIX + ℄ RADIO-DRIVE

STA.		
1+85.12 = M.H. #91 Stubs 6'+12' RT.		61.17 349.00 C12.17
1+50	Stubs 6' RT (upgrade)	54.64 345.97 C8.67
1+00	8.642%	46.04 341.64 C4.40
0+50	↓	42.34 337.32 C5.02
0+00 = M.H. #71 (= 76+82.22 RADIO-DR)		333.00
T.B.M.		352.66 = SPIKE Pole # P170360, S'LY OF NW Corn RADIO Rd + PARADISE

BITTERN ST.
(EXISTING SEWER NWly)
(staked by C.S.)

Station					
1+28.75 = Plug-End		78.92 370.00 C 8.92		378.92 359.00 C19.92	Note: house on Ely Bittern at 1+28.75 (Sew sta.)
1+00		77.65 366.79 C10.86		77.65 58.51 C19.14	Connection to house: EXIST outlet approx 99' RT. of ℄ ST. F.L. Elev. EXIST outlet = 362.90
0+50		75.86 361.19 14.67		75.56 57.66 C17.90	Elev. of plug-end = 359.00 = Fall of 3.9' to ℄ ST.
0+43 END CONC. BACKFILL					
0+12.50 =	M.H.# 157	74.50 356.99 17.51	(O.K)	74.50 356.99 C17.51	= M.H # 157
0+00 MEET EXISTING SEWER BEGIN CONC. BACKFILL		73.94 356.90 C17.04	(O.K)	373.94 356.90 C17.04	~~M.H. # 157~~ = EXIST Plug-end Sew:

See opp. 19' Sew lowered by order of office to meet house @ 1284 Bittern

1.72?

WREN: Esm't M.H #158, N'Ly to SCIMITAR

STA:		GRADE
0+60.29 = EVC		313.77 304.10 C 9.67
0+50.29		312.21 302.23 C 9.98
0+40.29		310.95 300.52 C 10.43
0+30.29		309.85 298.98 C 10.87
0+20.29 = BVC		308.98 297.62 C 11.36
0+00 = M.H #158 (= ℄ Esm'T 5+50.14 (See Book 406 - Pg 14))	308.12 294.70 (out.) C 13.42	308.12 295.20 (in) wren C 12.92

20.505 ℄ — Stubs 5' RT ℄

T.B.M — 304.93 = W'Ly 2x2 R.P. to ℄ Esmt + ℄ WREN

Ref: DWG: 6333-34-D, 6356-D-D

STA.		Grade
3+50		54.64 344.84 C 9.80
3+00		52.98 343.92 C 9.06
2+50 = M.H #159 P.O.T Stub 5' RT		48.98 343.00 C 5.98
2+00		41.52 332.74 C 8.78
1+50		32.06 322.49 C 9.51
1+00		21.35 312.24 C 9.11

1.846 ℄ (Bog stubs 6' LT ℄)

20.505 ℄

T.B.M = 352.64 = 40.74' chx Tie (LT.) to ℄BC 6+76.35 ST. STA

WREN (CONT.)

STA:		GRADE:
√ 6+00		65.18 357.40 C7.78
√ 5+50	7.80 5% stubs 6' LT	60.98 353.50 C 7.48
√ 5+00		57.91 349.60 C8.31
√ 4+66.64 = M.H #160 Δ= 47°12'16" RT. stubs 6.55' & 12' LT		56.72 347.00 C9.72
√ 4+50	1.84 6%	56.59 346.69 C9.90
√ 4+00		55.99 345.77 C10.22

T.B.M = 419.63 = ch□ w'ly end BLK-WALL ST. STA: 31+04.40 SCIMITAR ON RT. 23

T.Bm = 413.90 = NAIL Pole # JP173817 @ SE Cor Wren + Scimitar

(= end Wren Sew.)

STA		GRADE
√ 8+76.32 = M.H #162		95.76 386.00 C 9.76
√ 8+50		91.57 383.05 C8.52
√ 8+00	11.23 7% stubs 6' LT	85.72 377.43 C8.29
√ 7+50		80.41 371.81 C8.60
√ 7+00		75.33 366.19 C9.14
√ 6+71.64 = M.H #161 Δ= 19° 57' 40" RT stubs 6.09' + 12' LT		72.51 363.00 C 9.51
√ 6+50		70.39 361.31 C9.08

SPRINGFIELD: WINNETT, E'ly

STA:		GRADE
0+50=E.V.C		26.76 320.28 C6.48
0+40		25.20 318.74 C6.46
0+30	Stubs 6' RT ℄ (upgrade)	24.12 317.39 C 6.73
0+20		23.32 316.23 C7.09
0+10		322.73 315.27 C7.46
0+00= M.H # 147 =(4+18.19 Winnett See pg 16)		23.08 314.50 (IN) C8.58

T.B.M. 325.56 = 81' SW'ly R.P. chx on Conc. LDG (@1644 SPRINGFIELD)

Stub-end 1+93.35 = M.H #133 Stubs 6' + 12' RT		51.25 345.20 C 6.05
1+50		45.45 337.67 C 7.78
1+00	17.386 ℄	36.37 328.97 C 7.40

SPRINGFIELD:
ESMT M.H #126, W'LY

STA:			GRADE
1+00	— 12.62 @ stubs 6' RT (upgrade)		40.50 331.48 C 9.02
0+75			38.00 328.33 C 9.67
0+48.65 = M.H #135 (= 0+00, ORIOLE) stubs set 8.48' + 15' OFF & M.H ON SPLIT (NELY QUAD.)		35.64 324.50 (OUT) C 11.14	35.64 325.00 (IN) C 10.64
0+24.32	— 9.25 @ (K'ed by cont)		34.70 322.25 C 12.45
0+00 = ESMT M.H #126 (= 4+72.25 ESMT) stubs set 6.96' + 12' RT. ON SPLIT (SELY QUAD)		34.29 319.50 (OUT) C 14.79	34.29 320.00 (IN) C 14.29
T.B.M.		336.59 = Chd SELY Cor. Con. Porch @ #6409 SPRINGFIELD (NELY Corner)	

= end		
2+42 = M.H #134		55.36 349.40 C 5.96
2+00	— 12.62 @ stubs 6' RT (upgrade)	53.22 344.10 C 9.12
1+50		47.61 337.79 C 9.82

SPRINGFIELD:
ESMT M.H #126, E'LY

STA:		GRADE
0+45.75		36.15 323.36 C12.79
0+35.75	(K'od by cont.)	35.55 322.10 C13.45
0+25.75	Stubs 6' RT (upgrade)	34.83 321.13 C13.70
0+15.75		34.42 320.45 C13.97
0+05.75		34.31 320.06 C14.25
0+00 = M.H #126 (See Pg 25)		
T.B.M	336.59 (see Pg 25)	

STA:		GRADE
2+00	1.1762	59.82 351.93 C7.89
1+65.75 = M.H # 136 P.O.T. Stubs 6'4/12' RT		53.93 348.10 C5.83
1+50	Stubs 6' RT (upgrade)	50.92 344.74 C6.18
1+00	2.348	42.20 334.06 C8.14
0+65.75 = E.V.C	(K'od by cont.)	37.86 326.76 C11.10
0+55.75		36.90 324.91 C11.99

SPRINGFIELD: MH #126, ELY (CONT.)

STA:		GRADE:
4+18.85 = Plug end		97.43 384.59 C12.84
4+00		94.36 380.82 C13.54
3+96.60 = CHMNY LT.	20 Dia	
3+50		85.24 370.82 C14.42
Δ = 21° 43' 30" LT.		
3+25.91 = M.H #137 Stubs 6.11' & 12' RT ON SPLIT		80.80 366.00 C14.80
3+00	Stubs 6' RT (UPGRADE)	76.33 363.11 C13.22
2+50		68.13 357.52 C10.61

SPRINGFIELD: ESMT M.H #139, W'LY

STA:		GRADE:	
2+27.33 = M.H #138			404.17 398.40 C5.77
2+00			404.11 396.81 C7.30
1+50			400.52 393.91 C6.61
1+00	5.80% Stubs 6' RT (ON UPGRADE)		397.05 391.00 C6.05
0+50			94.96 388.10 C6.86
0+00 = ESMT M.H #139 (4+17.8 ESMT) Stubs 8.48' + 15' RT ON SPLIT (SE'LY QUAD)		97.19 384.70 (OUT) C12.49	97.19 385.20 (IN) C11.99
T.B.M		405.60 = NAIL & DISC Pole # 578863 @ SE'LY SWAN & SPRINGFIELD	

SPRINGFIELD : ESMT M.H #139, E'LY

T.B.M = 391.55 = Bolt in Sill - TP Fdtn, NE Corn unfinished Bldg, S. Side Springfield & W'ly ESMT

STA:	GRADE
1+73.29	23.94 416.16 C 7.78
1+63.29 = B.V.C	22.08 414.60 C 7.48
1+50	19.73 412.20 C 7.53
1+00	410.30 403.20 C 7.10
0+50	402 10. 394.20 C 7.90
0+00 = ESMT M.H #139 (See Pg 27)	385.20 (IN)
T.B.M (See Pg 27)	

Stubs 6' RT (Low upgrade) — 182

STA:	GRADE
2+73.29 = Beg (60' of Con - BK. FILL)	
2+50 = M.H #140 P.O.T.	34.50 420.57 C 13.93
2+23.29 = E.V.C	31.64 420.30 C 11.34
2+13.29	30.35 419.96 C 10.39
2+03.29	28.78 419.37 C 9.41
1+93.29	27.21 418.54 C 8.67
1+83.29	25.51 417.47 C 8.04

Stubs 6' RT (Up-grade)

Springfield: ESMT M.H #139, Ely (CONT.)

STA:	GRADE
Chk:	T.B.M 430.46 = Ch□ NW'ly Cor Conc. Ldg Side Door by gar @ 6569 Springfield (SE'ly Corn)
3+57.05 = Plug-end	34.77 421.00 C13.77
(3+33.29 end Con-BK-Fill)	
3+25	36.03 420.87 C15.16
3+00	36.35 420.77 C15.58
2+75	35.91 420.67 C15.24

0.46 — Stubs 6' RT

ESMT: M.H 66-A (STA: 63+14.80)
RADIO DR, N'LY to SPRINGFIELD M.H #139 & N'LY to SWAN. MH #130

Δ = 26° 48' RT		
EQ: 1+23.19 Ahd = 1+09.96 BK = M.H 125-A		
Stubs 6.17' + 12' RT on split		
	08 78 302.62 C6.16	
1+00	08 53 302.28 C6.25	
3.45 — Stubs 6' RT (upgrade)		
0+50	06.83 3.00.55 C6.28	
0+00 = M.H. 66-A	298.32 (OUT.)	298.82 (IN)
T.B.M	297.26 = Ch□ Conc. walk, (SE'ly Corner-House, RADIO DR & WINNETT)	

ESM'T: M.H 66-A (63+14.80 RADIO Dr N'ly to SWAN (CONT.)

STA:		GRADES:
2+72.02 = M.H #125 (Stubs 6' + 12' RT ON SPLIT)		17.08 / 308.80 / C 8.28
2+50	Stubs 6' RT 4.154%	15.08 / 307.89 / C 7.19
2+00		12.37 / 305.81 / C 6.56
1+50		09.52 / 303.73 / C 5.79

See opposite Pg →

Note: M.H #125 = 0+00 ESMT W'ly to M.H #125-B

(CONT. Pg 31)

Δ = 2° 15' 19" RT.

ESM'T, W'Ly M.H #125 to MH #125-B

STA:		GRADES:
(Stub end W'Ly) 2+17.11 = M.H #125-B		40.95 / 332.00 / C 8.95
2+00		40.90 / 330.18 / C 10.72
1+50	10.69% Stubs 6' LT ℄ (upgrade) (S'Ly)	38.17 / 324.83 / C 13.34
1+00		30.47 / 319.49 / C 10.98
0+50		21.33 / 314.44 / C 6.89
0+00 = M.H 125 (= 2+72.02 N'Ly ESM'T See opp. Pg.)		17.08 / 308.80 / C 8.28

ESMT (MH 66-A RADIO DR, N'LY to M.H #130 SWAN (CONT.)

STA:		GRADES
4+72.25 = M.H #126 (= 0+00 EAST & WEST SPRINGFIELD See Pg 26 & 25) stubs 6.96' & 12' RT S.E. QUAD SPRINGFIELD SEWER	34.29 319.50 (cal) C14.79	34.29 320.00 (IN) C14.29
4+50		34.37 318.30 C16.07
4+00		22.46 315.63 C6.83
3+50	5.34 Rt stubs 6' RT	20.44 312.96 C7.48
3+00		19.22 310.29 C8.93

CONT. from M.H #125 (2+72.02) See Pg 30-LT.

chk: T.B.M = 336.59 = Ch. □ SELY CORN CONC. PORCH @ #6404 SPRINGFIELD

31

STA:		GRADES
7+00	7.53 Rt	31.99 326.41 C5.58
6+60 = M.H #127 P.O.T. stubs 6' LT.		31.45 323.40 C8.05
6+50		31.31 323.21 C8.10
6+00	1.81 Rt stubs 6' LT	29.87 322.31 C7.56
5+50		29.70 321.40 C8.30
5+00		33.33 320.50 C12.83

ESM'T: M.H 66-A RADIO DR. N'LY to M.H #130 SWAN (CONT.)

STA:		GRADE:
		51.68
9+30	4.093 RT	340.83
		C10.85
	50'	
		49.40
8+80		338.79
	340.2'	C10.61
Δ = 7° 38' 45" RT.		
		46.61
8+45.98 = M.H # 128		337.40
Stubs 6.01 + 10' LT.		C9.21
	Stubs 6' LT ↓	
		42.14
8+00		333.94
	7.532	C8.20
		34.99
7+50		330.17
		4.82

STA:		GRADES:
		60.30
11+75		355.63
	9.128 RT	C4.67
	Stubs 6'	
		56.64
11+25		351.07
	548.63 ↑	C5.57
Δ = 5° 29' 38" LT.		
		56.27
Eq {10+80.37 A'h'd / 10+80.54 BK} = M.H # 129		347.00
		C9.27
Stubs 6.01' + 10' RT.		
	Stubs 6' LT ↑	
	4.093	51.99
10+30		344.92
		C7.01
		52.22
9+80		342.88
		C9.34

EASMT: M.H 66-A RADIO DR. N'LY to M.H #130 – SWAN (CONT.)

STA:		GRADE
CHK: = 378.06 = 80' NW'LY 2x2 tie to ℄ SWAN (M.H #130)		
12+72.25 = M.H #130 (= 0+00 SWAN SEWER See Pg 35)	75.06 364.50 (OUT) C 10.56	365.00 (IN)
12+25		70.85 360.19 C 10.66

ORIOLE

STA:		GRADE
2+50 = M.H #141		62.44 355.00 C 7.44
2+00	12" Stubs 5' LT ℄ (on upgrade)	55.15 349.00 C 6.15
1+50		48.86 343.00 C 5.86
1+00		42.88 337.00 5.88
0+50		37.72 331.00 6.72
0+00 = M.H #135 = 0+48.65 SPRINGFIELD (See Pg 25)	35.64 324.50 (OUT) C 11.14	35.64 325.00 (IN) C 10.64

T.B.M 336.59 = SE chd CONC. porch @ 6404 SPRINGFIELD

Ref: 6338-D
6356-E-D

ORIOLE: (CONT.)

(T.B.M. = 447.31 = P.K. NAIL Pole
by C.N.S
J-P 27074
Sta 5+48 LT

STA:	grades:	STA:	GRADE:
			47.13
3+10	75.26 365.31 C9.95	5+41.20 = Plug-end	430.00 C 17.13
		32.142	
3+00	72.77 363.03 C9.74	5+00 = M.H #142	27.91 416.76 C11.15
2+90	70.36 360.98 C9.38	4+50	413.92 403.16 C10.76
		27.20	
2+80	68.05 359.15 C 8.90	4+00	400.01 389.56 C10.45
2+70	66.02 357.54 C8.48	3+50	386.10 375.96 C10.14
2+60	64.16 356.16 C8.00	3+20 = E.V.C	77.77 367.80 C9.97

SWAN: ESMT m.H #130, N'Ly

STA:		GRADES
T.B.M = 378.06 = 80' NW'Ly 2x2 Tie to E SWAN (m.H #130)		
= end Sew.		
1+40.17 = M.H #150 P.O.T.		92.95 383.20 C9.75
	12.99' @ 5 stubs 6' Rt. (Upgrade)	
1+00		85.33 377.98 C7.35
0+50		78.63 371.49 C7.14
0+00 = M.H #130 stubs 6'4½' RT @ 90° E SWAN (See pg 33	75.06 364.50 (OUT) C10.56	75.06 365.00 (IN) C10.06
T. B.M.		405.60 = NAIL-DISC Pole # 578863 @ (SE'ly SPRINGFIELD & SWAN)

SWAN: ESMT m.H #130, S'Ly

STA:		GRADES:
2+25	6.76' @	82.16 375.40 C6.76
1+75	33.57'	78.55 372.02 C6.53
1+41.43 = M.H #131 P.O.T.		76.40 369.75 C6.65
1+00	3.36' @ 5 stubs 6' Rt. (Upgrade)	74.73 368.36 C6.37
0+50		74.02 366.68 C7.34
0+00 = M.H #130 (See opp. Pg)		365.00

SMAN: S'ly (CONT.)

STA:		GRADES:
= end Sew 3+93.57 = M.H.#132		92.81 386.80 C6.01
3+75		91.72 385.54 C6.18
3+25	6.762%	88.88 382.16 C6.72
2+75		85.54 378.78 C6.76

ESMNT SEW: M.H #97

RADIO-Dr, S'ly to M.H #96, et al

Ref: 6337-D 6356-ID

STA:			GRADES:
0+97.80			26.27 320.22 C6.05
0+87.80	STUBS 6' RT		26.11 319.58 C6.53
0+77.80			26.12 319.13 C6.99
0+67.80 = B.V.C	0.57%		25.96 318.89 C7.07
0+33.90			26.18 318.69 C7.49
0+00 = M.H. #97 7+03.14 RADIO Dr.		318.00 (OUT.)	318.50 (IN)

ESMT: M.H #97 to M.H #96 & #95

RADIO-DR, S'ly, et al (CONT.)

STA:		GRADES:
		42.54
2+95.22		337.25
		C 5.29
		42.09
2+85.22 = B.V.C		336.86
		C 5.23
Δ = 90° RT (to M.H #95)		
	40.74	40.74
2+42.80 = M.H #96	335.50 (IN)	335.00 (OUT)
Stubs 8:48'+15' on Split (NW quad)	C 5.24	C 5.74
		36.82
2+00.		330.58
10.32 Stubs 6' RT		C 6.24
		31.29
1+50		325.42
		C 5.87
		27.14
1+07.80 = E.V.C.		321.06
		C 6.08

STA: (See Pg 38 - For Ely leg.)
= Wly end

STA:	GRADES:
	53.65
4+74.59 = M.H #95	349.28
Stubs 6'+12' RT	C 4.37
	51.77
4+25	345.85
6.95 Stubs 6' RT	C 5.92
	47.29
3+75	342.38
	C 4.91
	43.76
3+25.22 = E.V.C	338.89
	C 4.87
	43.47
3+15.22	338.27
	C 5.20
	42.95
3+05.22	337.72
	C 5.23

ESM'T: M.H #97 RADIO-DR, S'ly et al (CONT.)

(M.H #96, E'ly to END)

STA:		Grades:
T.BM chk:	355.50 = 355.47 = chd TP, N'ly end Lower Conc. step (N'ly side House) AT 14+35 ORIG. ESM'T Notes P236	
= E'ly end		
1+30 = P/og-end		59.68 344.60 C 15.08
1+00		55.48 342.50 12.98
0+50	dip	347.16 339.00 C 8.16
0+00 = M.H #96 (See Pg 37)		335.50 (IN)

2-3-61

ESM'T SEW: M.H #68 RADIO DR

STA: 67+64.80, S'ly to M.H #94, et al

STA:		GRADES:
		13.88 309.27 C 4.61
1+12.80		
Ref: DHG 6337-D 6356-ID		13.12 308.57 C 4.55
1+02.80		
0+92.80	STUBS 6' RT	12.68 308.09 C 4.59
0+82.80 = B.V.C		12.78 307.83 C 4.95
0+41.40	0.40%	317.59 307.67 C 7.92
0+00 = M.H #68 STA: 67+64.80 RADIO DR. (EXIST. THIS DATE)		307.00 (OUT) 307.50 (IN)
T.B.M. Conc. walk, house @ SE'ly		297.26 = chd NW'ly Corn. RADIO-DR & WINNETT

ESMT: M.H #68 - RADIO DR S'ly to M.H #94 & W'ly to Plug-end (CONT.)

(See opp Pg - to E'ly)
= W'ly end

2+92.80 = Plug-end

344.27
338.40
C 5.87

Δ = 90° RT (to W'ly Plug-end)

2+42.80 = MH #94
Stubs 8.48' +15' RT on split (NW quad.)

33.79
329.00 (IN)
C 4.79

33.79
328.50 (OUT.)
C 5.29

15.88

1+92.80

27.11
320.59
C 6.52

1+42.80 = E.V.C

17.97
312.69
C 5.28

1+32.80

16.55
311.33
C 5.22

1+22.80

3 14.96
310.19
C 4.77

ESMT: M.H #68 - RADIO DR, S'ly (M.H #94 to E'ly) (CONT.)

STA:

GRADES:

= E'ly end

1+33 = Plug-end

50.80
342.17
C 8.63

9.90

1+00

45.79
338.90
C 6.89

0+50

336.93
333.95
C 2.98

M.H #94
(See opp. Pg)

329.00 (IN)

ESMT SEW:

M.H #145 WINNETT, E'ly to
Plug-END = 6+80.91

STA:	GRADE
2+00	59.43 345.64 C 13.79
1+50	51.76 336.63 C 15.13
1+00	38.12 327.62 C 10.50
0+50	29.36 318.61 C 10.75
0+00 = M.H #145 = STA 2+43.09 WINNETT SEW: (See Pg 19)	318.39 309.60 8.79

18.023 @ Stubs 8'LT & (upgrade)

C 0.8 TP M.H

T.B.M = 317.71 = NAIL Pole #170380
SEW. STA 2+37 WINNETT (W'ly side ST.)

T.B.M = 361.82 = NAIL Corn. Fence POST @ 2+31-LT.

STA:	GRADE
3+75	59.60 351.91 C 6.69
3+50	59.88 351.77 C 8.11
3+25	61.25 351.63 C 9.62
3+00	62.25 351.49 C 10.76
2+75	63.21 351.35 C 11.86
2+50	61.81 351.21 C 10.60
P.O.T 2+30.26 = M.H #92 Stubs 8'+14' RT @ 90°	361.04 351.10 C 9.94

0.562 @

ESMT: M.H #145 Winnett, Ely (CONT.)

STA:		GRADE
6+00		69.08 358.10 C10.98
5+50	4.7% ↓	68.61 355.75 C12.86
5+00		64.94 353.40 C11.54
P.O.T. 4+80.91 = M.H #93 stubs 8' & 14' RT @90°		62.77 352.50 C10.27
4+50		60.22 352.33 C7.89
4+25		58.75 352.19 C6.56
4+00		359.47 352.05 C7.42

STA:		GRADE
chk:	297.23 – 297.26 = ch□ conc- walk, house SE'ly Winnett & Radio-Dr.	
6+80.91 = plug-end stubs 8' & 15' RT		66.88 361.90 C4.98
6+50		69.58 360.45 C9.53

ESMT: M.H #70 (RADIO-DR)

N'Ly to M.H #139 (SPRINGFIELD)

REF: #6325-D
6352-D

STA:		GRADES:
2+42.80 = M.H #123 Stubs set 8.48+15' ON Split Δ (S.E. QUAD)	66.52 359.60 (IN.) C 6.92	66.52 359.10 (OUT) C 7.42
2+00		61.46 353.97 C 7.49
1+50		57.50 347.97 C 6.53
1+00 Stub 6' LT.	11.98 Δ Stubs 6' RT & unless noted	44.57 341.98 C 2.59
0+50 Stub 6' LT		42.50 335.99 C 6.51
0+00 = M.H #70 (RADIO-DR STA: 74+34.14)		330.00 (IN)
T.B.M.	346.53 = 30' N'Ly Ch x tie to ℄ RADIO DR SEATTIX	

STA:		GRADES:
T.B.M		391.55 = BOLT, TP. S.11, NE. CORNER FDTN UNFINISHED BLDG S'Ly SPRINGFIELD + W'Ly ESMT
4+17.80 = M.H #139 Stubs set 8.48' +15' ON SPLIT (S.E. Quad) (ON RT.) (See Pg 27)		384.70 (OUT)
3+75	14.34 Δ Stubs 6' RT &	86.29 378.55 C 7.74
3+25		77.88 371.37 C 6.51
2+75		71.11 364.20 C 6.91

ESMT (CONT.) M.H # 123, W'LY to M.H # 122

STA:		GRADE:
0+98		65.93 361.08 C4.85
0+88		64.94 360.65 C4.29
0+78	Stubs 5' LT.	65.24 360.34 C4.90
0+68 = B.V.C		64.88 360.14 C4.74
0+34	0.80 ↓	65.66 359.87 C5.79
M.H # 123 (see pg 42)		359.60 (IN)
T.B.M.	391.55	(See T.B.M PP RT. pg 42)

STA:		GRADE:
2+25 = M.H # 122		73.46 369.40 C4.06
2+00	Stubs 5' LT.	73.43 367.74 C5.69
1+50	6.04 ↓	70.61 364.42 C6.19
1+08 = E.V.C		66.74 361.63 C5.11

ESM'T: (CONT.) M.H # 123, E'y to plug-end

STA:	GRADE:
2+12 = M.H # 124 P.O.T (stub 5' RT.)	91.91 388.50 C 3.41
2+00	90.68 386.86 C 3.82
1+50	85.41 380.04 C 5.31
1+00	78.41 373.23 C 5.18
0+50	71.19 366.41 C 4.78
0+00 = M.H # 123 (See Pg 42)	359.60 (IN)
T.B.M	391.55 (See Pg 43)

— 136.32 —

Stubs 6' RT. & unless noted.

STA:	GRADE:
3+10 = Plug-end	96.74 393.00 C 3.74
3+00	96.93 392.54 C 4.39
2+50 stub 5' RT	94.62 390.24 C 4.38

— 4.59% —

SPARROW - ℄ ESMT N'w'ly to D-END

Ref: Dwgs: 6334-D, 6356-H-D

STA:	GRADE
2+00	66.48
	357.88
	C 8.60
1+50	63.43
	354.26
	C 9.17
1+00	59.57
	350.64
	C 8.93
0+50	55.79
	347.02
	C 8.77

T.2+48 Stubs 6' RT.

(See Book 406 - Pg. 15)

0+00 = M.H # 174 (= 11+80.60 ESMT)

Stubs 8.48' +15' RT (S.E. QUAD)

	352.51	352.51
(OUT)	342.90	(IN) 343.40
	C 9.61	C 9.11

T.B.M 352.26 = (33' sw'ly ch x Tie to M.H 174) (CH x TP CONC. CB INLET)

T.B.M. 371.29 = 16' NE'ly Ch x tie to ℄ SPARROW & ℄ Klauber

STA:	GRADE:
4+00	66.75
	363.85
	C 2.90
3+50	67.29
	363.35
	C 3.94
3+00	73.30
	362.85
	C 10.45
2+63.74 = M.H # 175	79.08
	362.49
	C 16.59
2+50	79.61
	361.50
	C 18.11

1.0%

A = 43°58' LT

Stubs 6.47 +12' RT ON SPLIT.

(2+47 = Beg 14' Conc. BK - Fill)

SPARROW & ESM'T (CONT)

Chk:	352.30 = 352.26	
4+54.89 = Plug-end		76.04 364.40 C 11.64
425		367.75 364.10 3.65

FEDERAL Blvd: EXIST CANYON R MAIN, Ely to plug-end

Ref: DWG's 5916-D, 5919-D

STA:		GRADE
1+50		45.29 238.98 C 6.31
1+00		43.24 236.66 C 6.58
0+50		41.52 234.34 C 7.18
0+22.72		41.00 233.07 C 7.93
0-04.55 = M.H. #67-B Stub 10' LT + Chk X 20' LT ℄ @ 90° to sew.		40.44 231.81 ± C 8.63
T.B.M		254.73 = N'ly 15' Chk tie to city Disc, on W.L. 60th @ Fed. Blvd

Chk's 4/on stubs 10' LT ℄ (upgrade) 4.64%

STA:	GRADE
Δ= 38° 07' 30" LT	54.92
3+65.85 = M.H #69-B	249.00
Stub 10.58' + chx's 16.58'	C5.92
+ 22.58' LT. on split.	
(= 0+00 60"th)	
3+50	54.56
	248.26
	C6.30
3+00	52.74
	245.94
	C6.80
4.64'	
2+50	50.14
	243.62
	C6.52
2+00	47.62
	241.30
	C6.32
Δ= 3° 49' 44" RT	46.70
1+80 = M.H #68-B	240.37
chx's 10.01' + 9.99 LT	C6.33
on split	

STA:	GRADE:
	60.52
6+00	253.71
2.06	C6.81
5+50	59.37
	252.68
	C6.69
Δ= 13° 05' 30" RT	
5726.83 = M.H #70-B	59.07
chx's 10.07' + 20' LT &	252.20
on split	C6.87
5+00	58.37
	251.67
	C6.70
1.99	
4+50	57.46
	250.67
	C6.79
4+00	56.03
	249.68
	C6.35

STA:	GRADE:
8+50	63.77 257.13 C 6.64
0.86	
8+00	63.33 256.70 C 6.63
7+50	62.75 256.27 C 6.48
Δ = 8° 18' 30" LT.	
7+06.85 = M.H. #71-B Chx's 10.03' & 20' LT & ON SPLIT	62.41 255.90 C 6.51
7+00	62.36 255.77 C 6.59
2.06	
6+50	61.65 254.74 C 6.91

STA:	GRADE
11+00	66.03 259.57 C 6.46
1.05	
10+50	65.48 259.05 C 6.43
10+00	64.89 258.52 C 6.37
Δ = 14° 08' 49" RT.	
9+51.10 = M.H. #72-B Chx's 10.08' & 20' LT & ON SPLIT	64.69 258.00 C 6.69
9+50 Not-Set	257.99
0.86	
9+00	64.07 257.56 C 6.51

FED. Blvd. (CONT.)

T.B.M {Chd on N'ly edge PAV @ 90° to E.C Sew} = 267.32
12+59.02

STA:		GRADE:
P.O.T Eq. {12+74.57 Ahd / 12+74.78 BK} = M.H #73-B chx's 10' & 20' LT ℄ @ 90° for tang		67.86 261.40 C6.46
12+59.02 = E.C chx's 10' & 20' LT ℄		67.72 261.24 C6.48
12+14.82 = mid-pt curve chx' 10' LT		67.28 260.78 C6.50
11+70.63 = B.C chx's 10' & 20' LT ℄	1.05% ←	66.87 260.32 C6.55
11+50		66.60 260.10 C6.50

STA:		
P.O.T. 15+30.57 = M.H #74-B chx's 10' & 20' LT ℄		69.85 264.00 C5.85
15+00		69.58 263.70 C5.88
14+50		69.18 263.19 C5.99
14+00	1.02% ←	68.80 262.68 C6.12
13+50		68.36 262.17 C6.19
13+00		67.96 261.66 C6.30

FED. Blvd. (CONT.)

STA:	GRADE:
16+59.57 = Plug-end chx's 10' + 20'47 ℄	71.03 265.00 C 6,03
16+50	70.96 264.94 C 6.02
0.78%	
16+00	70.45 264.55 C 5.90
15+50	70.03 264.16 C 5.87

DWG: 5916-D, 5917-D, 5920-D, 5923-D

60th ST: & EGRET (FED.-Blvd; S'Ly)

50

T.B.M = 272.48 = ch□ Drive S'Ly side Fulmar # 6009

STA:		GRADE
(42.08')		
2+27.08	7.13%	68.10 260.00 C 8.10
(42.08')		
1+85 = M.H # 80-B = 265.2 = TP (= 0+00 Fulmar) Stubs 6' + 10' RT	65.84 C 0.64	65.84 257.00 C 8,84
1+50		64,54 255.49 C 9,05
1+00	4.32% Stubs 6' RT (upgrade)	62.32 253.32 C 9,00
0+50		59.45 251.16 C 8.29
0+00 = M.H # 69-B (= 3+65.85 FED. Blvd) See Pg 47		54.92 249.00 C 5.92
T.B.M	254.73 = N'Ly 15' ch x tie to city Disc, W'Ly Line 60th.	

60th ST. & EGRET (CONT.)

FED. Blvd, S'ly

STA:		GRADE
4+50		11.95 304.35 C7.60
(47.89')		
4+02.11 = M.H #87-B Stubs 6'+10' RT	01.5 301.8 = TP M.H F0.3	301.47 294.00 C7.47
4+00 (not set)		293.51
23.32'		
3+50		90.30 281.85 C8.45
3+00		79.48 270.19 C9.29
(30.84')		
2+69.16 = M.H #80-A-B (= 0+00 ESM'T) Stubs 6'+10' RT.	73.1 272.10 = TP C1.0	73.10 263.00 C10.10

T.B.M 358.46 = 50' W'ly 2x2 tie to ℄ 60th & EGRET

51

STA:		GRADE
7+22		60.07 348.28 C11.79
0.40'		
6+87		60.90 348.14 C12.76
(34.89')		
Δ = 90° LT.		
6+52.11 = M.H # 86-B Stubs 8.48'+15' RT ON SPLIT.	61.66 359.2 = TP C2.46	61.66 348.00 C13.66
6+00		47.32 336.75 C10.57
21.60'		
5+50		35.18 325.95 C9.23
5+00		23.10 315.15 C7.95

60th St. & EGRET (CONT.)

FED. Blvd, S'ly

STA:	GRADE:
	60.53
9+25	349.58
	C10.95
(34.54')	
Δ = 56° 44' 10" RT.	
8+90.46 = M.H #85-B	60.25
stub 6.82' + 15' RT ON SPLIT	348.95
(60.25 / 360.22 = TP M.H / C0.03)	C11.30
(28.46')	
	60.47
8+62	348.84
	C11.63
1.40%	
	60 45
8+27	348.70
	C11.75
	60.21
7+92	348.56
	C11.65
	59.87
7+57	348.42
	C11.45

T.B.M. = 391.98 = 40' NE'ly 2x2 tie to NE'ly Corner WEATER & 60th (52)

STA:	GRADE:
(EGRET (Stub-end))	
	65.41
11+13.82 = M.H #84-B	353.00
stubs 6' + 10' RT.	C12.41
(65.41 / 367.2 = TP M.H / C1.2)	
	62 76
10+75	352.30
	C10.46
1.81%	
	61.48
10+25	351.39
	C10.09
	60.63
9+75	350.49
	C10.14

FULMAR:

60'Lt, E'Ly

STA:	GRADE
2+00	291.50 283.38 C 8.12
1+50	82.94 276.78 C 6.16
1+00	75.98 270.19 C 5.79
0+50	70.28 263.59 C 6.69
0+00 = M.H # 80-B (= 1+85 60'Lt) See Pg 50	65.84 257.00 C 8.84

13.198 Stubs 6' RT (upgrade)

T.B.M. 272.48 = Chiseled Con. Drive S'Ly Side FULMAR # 6009

STA:	GRADE:
4+50	340.14 333.30 C 6.84
4+00	30.91 322.77 C 8.14
3+50	21.46 312.23 C 9.23
3+00	11.79 301.70 C 10.09
2+50	301.36 291.16 C 10.20
P.O.T. 2+35 = M.H # 88-B Stubs 6'+10' RT	98.33 288.00 C 10.33
98.3 297.5 = TP M.H C 0.8	

3.073 Stubs

Ref: DWG: 5916-D
5917-D
5921-D

FULMAR (60th E'LY)
CONT.

STA:

GRADE

Δ = 1°41'18" RT

6+35 = M.H # 90-B
stubs 6'+10' RT
on split

70.0
372.0 = TP
F 2.0

69.99
365.80
C 4.19

6+00

64.81
359.91
C 4.90

16.84 %

5+50

57.53
351.48
C 6.05

5+00

49.00
343.06
C 5.94

Δ = 28° 38' 45" RT

4+81.76 = M.H # 89-B
stubs 6.36' +10' RT
on split

46.1
345.6 = TP
C 0.5

46.08
340.00
C 6.08

T.B.M. 387.07 = 20' 2x2 tie, E'LY, to (54
Prop. BC STA (ST.) 7+20 LT.
FULMAR

STA:

GRADE:
404.26
387.97
C 16.29

8+50

(8+48.4) Beg Con.-BK. Fill

96.06
383.42
C 12.64

9.09 %

8+00

Δ = 31° 28' LT.

7+84.41 = M.H # 91-B
stubs 6.24 +10' RT
on split

93.30
382.00
C 11.30

93.3
392.6 = TP
C 0.7

7+50

89.97
378.27
C 11.70

10.84 %

7+00

81.00
372.84
C 8.16

6+50

72.32
367.42
C 4.90

FULMAR (CONT.)

T.B.M	430.42: Chd Conc. LDG Stairs @ #6150 Fulmar	
10+33.08 =	Plug end	427.56 406.00 C21.56
	10.407% stubs 6' RTE (upgrade)	
10+00		25.76 402.56 C23.20
9+50		418.13 397.36 C20.77
Δ: 47° 40' 12" RT		
9+27.41 = M.H #91-A-B Stubs set 6.56' + 10' RT. on split	15.5 415.0 = TP C0.5	415.49 395.00 C20.49
9+00	9.09%	412.29 392.51 C19.78

ESMNT: M.H # 80-A.B (STA 2+69.16 60th ST.) to M.H # 83-A-B WEAVER

STA:		GRADE
Δ = 12° 40' 41" RT		
1+23.40 = M.H # 81-B Stubs 6.04' + 12' LT. on split		71.41 264.00 C7.41
	stubs 6' LT (upgrade)	
0+82.26		69.66 263.67 C5.99
0+41.13	0.81%	70.40 263.33 C7.07
(3 pts)		
0+00 = M.H # 80-A-B (= STA: 2+69.16 60th) See pg 51		73.10 263.00 C10.10
T.B.M	272.48 = Chd Con. Dr. S'ly side Fulmar @ # 6009	

ESMT (MH 80-AB 60'th to WEAVER) CONT.

STA:	GRADE:
3+50	89 12 280.14 C8.98
A= 24°28'17" RT 3+22.26 = M.H # 82-B Stubs 6.14' & 12' LT. ON SPLIT	87 10 277.50 C9.60
3+00	85 55 275.99 C9.56
6.78 @ 9%	
2+50	82 52 272.59 C9.93
2+00	77.53 269.20 C8.33
1+50	73.10 265.81 C7.29

STA:	GRADE:
M.H 83-B = 5+70.67 Ahd Note: Eq: = 5+65.05 Bk	
Δ = 58° 24' 20" LT. (Plug to 5'4")	13.69 300.61 C13.08
5+70.67 = M.H # 83-B Stubs 6.87' & 15' LT. ON SPLIT	
5+50	311.42 299.17 C12.25
5+00	304.35 294.41 C9.94
9.51 @ 9.52 @	
4+50	98 91 289.65 C9.26
4+00	93 86 284.89 C8.97

ESMT: M.H. # 80-A-B 60'th to WEAVER (CONT.)

STA: GRADE

STA		GRADE
7+28.62 = M.H # 83-A-B, stubs 8.48' & 15' LT ON SPLIT (NWLY QUAD)		67.99 / 360.00 / C7.99
	67.99 / 367.50 = TP MH / C 0.49	
7+00	37.60	61.71 / 349.25 / C12.46
(6+75.67 = ℄ CONC-CUT-OFF WALL)		
(6+40.67 = ℄ CONC. CUT-OFF WALL)		
6+50		41.24 / 330.45 / C10.79
(6+05.67 = ℄ CONC-CUT-OFF WALL)		
6+00		323.32 / 311.65 / C11.67

WEAVER ST. (M.H # 83-A-B 7+28.62) (ESMT, 45' S'LY & 60' N'LY)

STA		GRADE
0+60 = N'LY PLUG-END		70.43 / 364.40 / C6.03
0+30	7.33	69.03 / 362.20 / C6.83
	stubs 6' LT (N'LY)	
0+00 = M.H 83.A-B (see opp. pg.)		67.99 / 360.00 / C7.99
	.40	
0-45 = S'LY PLUG-END		65.98 / 360.18 / C5.80

1-4-61

BURIAN: (60'th, E'ly to plug-end)

Ref: DWG: 6329-D
6349-D

STA:	GRADE
3+00	27.60 320.86 C 6.74
2+50	26.32 318.19 C 8.13
2+00	24.71 315.51 C 9.20
1+50	22.40 312.83 C 9.57
1+00	19.43 310.15 C 9.28
0+50	15.44 307.48 C 7.96
(0+00 = M.H #28, & 60'th) See Pg 59	304.80
T.B.M	312.10 = 45' w/y 2x2 R.P. to E 60'th + BURIAN

5.35' Rt
Stubs 5' Rt E upgrade

STA:	GRADE
4+65.64 = plug-end	31.95 323.00 C 8.95
4+50	31.06 322.84 C 8.22
4+00	28.85 322.33 C 6.52
3+50	27.96 321.81 C 6.15
Δ = 23° 48' 34"	
3+10 = M.H #29 Stubs 5.11' + 10' RT E (ON SPLIT)	27.70 327.40 = TP. C 6.3 27.70 321.40 = F.L C 6.30

1.038

1-4-61

60'th: (CANYON ESMT M.H #7, S'ly to Plug-end)

STA:		GRADE:
		97.47
2+00		289.65
		C 7.82
	19.09 ft	
1+50		87.01
		280.11
		C 6.90
1+31.07 = M.H #30	83.8 282.8 = TP C 1.0	83.80 276.50 C 7.30
1+00		79.93 274.16 C 5.77
	7.55 ft Stubs 5' RT'S	
0+50		78.18 270.38 C 7.80
0+00 = M.H #7 (ESMT Sew.) Stubs 5'+10' RT at 90° 60'th	81.11 266.10 (OUT) C 15.01	81.11 266.60 (IN) C 14.51
	81.11 281.40 = TP F 0.29	
T.B.M.	283.10 = 60' W'ly 2x2 R.P. to 60'th + ESMT	

T.B.M. 312.10 = 45' W'ly 2x2 R.P. to 60'th + BURIAN

STA: P.O.T.		GRADE
		35.12
4+21.07 = M.H #27		329.30
	35.1 335.3 = TP F 0.2	C 5.82
4+00		32.70 325.64 C 7.06
	17.31 ft	
3+50		25.34 316.98 C 9.36
3+00		16.70 308.33 C 8.37
		12.68 304.80 (BURIAN) C 7.88
Δ = 116° 29' Lt to BURIAN 2+76.71 = M.H #28 Stubs 5.00' x 10' RT @ 90° to 60'th	12.7 313.1 = TP F 0.4	12.68 304.30 (60'th) C 8.38
2+50		307.95 299.20 C 8.75

60'h (m.H #7, S'ly - Cont.)

STA:	GRADE:
T.B.M	344.43 = NAIL Pole #546079.H (Street sta:) Approx. STA = 7+50± 60'h E'ly side ST
5+59.91 = plug-end	36.88 330.60 C6.28
5+50	37.33 330.51 C6.82
.936 dia ↓	
5+00	39.51 330.04 C9.47
4+50	37.59 329.57 C8.02

1-6-61

ESMT SEW: M.H #7 (℄ 60th)

E'LY

STA:			GRADE:
1+50			83.41 272.07 C 11.34
(to UPLAND) Δ = 56° 40' 08" LT = P.O.T. E'LY LINE 1+28.26 = M.H #8 Stubs 5' + 10' RT at 90° ℄		81.12 267.88 (OUT) C 13.24	81.12 268.38 (IN) C 12.74
1+00			78.40 267.60 C 10.80
0+50	← 1.0% stubs 5' RT		73.10 267.10 C 6.00
0+00 = M.H #7 (℄ 60th) See pg 59			81.11 266.60 C 14.51

T.B.M. 283.10 = 60' W'ly 2x2 R.P. ℄ Esmt + ℄ 60'th

STA:		GRADE:
3+20		308.92 299.06 C 9.86
3+10		306.49 298.26 C 8.23
3+00		304.14 297.16 C 6.98
2+90 = B.V.C		301.70 295.77 C 5.93
2+50	← 16.936%	93.65 289.00 C 4.65
2+00		87.02 280.54 C 6.48

ESM'T:
M.H #7 (℄ 60'th, E ly) Cont.

STA:		grade:
5+50.24 = N'ly Plug-end		303.58 301.69 C 1.89
(5+39.24 = Beg Conc-enc.)		
5+00		06.57 301.49 C 5.08
4+50	0.4% stubs 5' ET.	309.56 301.29 C 8.27
4+00		313.36 301.09 C 12.27
(7.0 N'ly plug-end Δ = 63° 30' LT		
3+76.89 = M.H #31 stubs	315.29 300.50 (out) C 14.79	315.29 301.00 (in) C 14.29
3+50	2.00%	314.18 299.96 C 14.22
3+30 = E.V.C		310.89 299.56 C 11.33

ESM'T: M.H #31, 5'ly to plug-end (Cont.)

62

STA:		grade:
T.B.M		296.77 = 60' 2x2 NWly R.P. to ℄ upland + ℄ ESM'T
1+26.62 = 5'ly Plug-end		314.84 309.86 C 4.98
1+00		317.25 308.00 9.25
0+50	7.00% 5' ET. stubs	317.25 304.50 C 12.75
0+00 = M.H #31 (see opp. pg.)		301.00 (in)

ESMT: M.H #8, N'Ly to UPLAND, Dipper + 60'ft etc.

1-6-61

STA:	GRADE
	91.14
2+50	281.56
	C9.58
	84.69
2+00	278.93
	C5.76
5.27 ft	
	83.25
1+50	276.29
	C6.96
	82.01
1+00	273.65
	C8.36
	80.56
0+50	271.02
	C9.54
	81.12
0+00 = M.H #8	268.38 (IN)
= 1+28.26 ESMT, E'Ly	C12.74
(See Pg 61)	
I.B.M.	283.10 (See Pg 61)

STA:		GRADE
Δ = 14° 42' 03" LT Δ = 73° 42' 45" RT #	99.95	99.95
5+54.78 = M.H 10	292.50 (OUT.)	293.00 (IN)
Stubs set 7.44' 415' RT	C7.45	C6.95
ON SPLIT (S.E'Ly QUAD)		
		98.70
5+00		290.80
		C7.90
		97.24
4+50		289.25
		C7.99
3.09 ft Stubs 6' RT		
		94.93
4+00		287.70
		C7.23
		91.11
3+50		286.15
		C4.96
Δ = 17° 02' 43" LT.		
	94.16	94.16
2+96.45 = M.H #9	284.00 (OUT)	284.50 (IN)
E UPLAND	C10.16	C9.66
Stubs 5.06' + 10' RT		
ON SPLIT	94.16	
(SE'Ly QUAD)	295.60 = TP	
	F1.44	

ESMT: CONT. (M.H #8 N'ly to M.H #11
Dipper & 60'th)

STA:		GRADE
T.B.M.	325.40 = W'ly to ℄	40' 2x2 R.P Dipper & 60'th
8+02.83 = M.H #11 ℄ 60'th & Dipper (=0+00 N'ly Tooley) (=0+00 E'ly Dipper)	20.72 308.00 (OUT) C12.72 ; 20.72 320.40 = TP C0.32	20.72 308.50 (IN) C12.22
7+50	6.04 7% ↓ Stubs 6' RT	311.50 304.81 C6.69
7+00		307.27 301.77 C5.50
6+50		305.01 298.75 C6.26
6+00		302.26 295.73 C6.53

ESMT. (CONT.) M.H #10, E'ly to M.H #33, etc

STA:		GRADE:	
2+00	2.50% ↓ Stubs 6' LT	15.82 308.40 C7.42	
Δ = 90° LT, to N'ly Plug-end			
1+69.98 = M.H #33 Stubs set 8.48 + 15' RT on split (SW'ly Quad)		17.31 307.15 (OUT) C10.16	17.31 307.65 (IN) C9.66
1+50	8.325% ↓	16.42 305.49 C10.93	
1+00		311.58 301.32 C10.26	
0+50		303.28 297.16 C6.12	
0+00 = M.H #10 (= 5+54.78 ESMT. See pg 63)		293.00 (IN)	

ESMT: CONT.

{M.H #10, ESMT} E'ly, to M.H #33, etc

0+54.45 = S'ly Plug-end

19.65
315.00
C4.65

0+00 = M.H #33
See Pg 64

13.50 ø STUB ET

307.65 (IN)

↑ {M.H #33, to S'ly

2+83.88 = N'ly Plug-end

16.83
310.50
C6.33

2+50

2.50 ø STUB ET

16.44
309.65
C6.79

1-6-61

60'th ST. M.H #11 (& Dipper)
N'ly to M.H #13 (& Tooley)

STA:

GRADE:

P.O.T.

2+48.43 = M.H #12

36.73
325.00
C 11.73

36.73
337.47 = TP
F 0.74

2+00

32.04
321.79
C 10.25

6.642 DD
STUBS 5' RT

1+50

28.20
318.46
C 9.74

1+00

25.02
315.14
C 9.88

0+50

22.43
311.82
C 10.61

0+00 = M.H #11
(= 8+02.83 ESMT)
See pg 64

20.72
308.50 (IN)
C 12.22

T.B.M

325.40 = 40' n'ly 2x2 R.P.
to & 60'th & Dipper

T.B.M.

383.89 = 50' n'ly 2x2 R.P.
to & 60th & Tooley

T.B.M

367.83 = NAIL Pole
SE'ly Corn.
60'th & Tooley

Δ = 75° 13.5' RT

4+57.25 = M.H #13
Stubs 6.317 10' RT
ON split
(SELy quad)

14.366 DD

68.24
355.00 (OUT)
C 13.24

68.24
355.50 (IN)
C 12.74

68.24
369.02 = TP
F 0.78

4+50 (not set.)

353.95

4+00

(3+65.15 = end Con.-encase)

59.30
346.77
C 12.53

3+50

(3+45.15 = Beg Con.-encase)

50.77
339.59
C 11.18

3+00

43.30
332.41
C 10.89

1-10-61

TOOLEY ST: M.H #13 (℄ 60th)
E'ly to plug-end

STA:		GRADE
2+50		73.57 365.20 C 8.37
2+00		72.30 363.26 C 9.04
1+50	3.883 %	71.10 361.32 C 9.78
1+00	← stubs 5' RT.	69.99 359.38 C 10.61
0+50		69.21 357.44 C 11.77
0+00 = M.H #13 (℄ 60th See pg. 66)		68.24 355.50 (IN) C 12.74

T.B.M 383.89 = 2×2 50' N'ly R.P. to ℄ 60th + Tooley

STA:		GRADE
4+97.63 = M.H #15	96.27 395.70 = TP C 0.57	96.27 388.00 = F.L C 8.27
4+50	12.667 %	88.56 381.97 C 6.59
4+00	←	82.18 375.64 C 6.54
P.O.T. 3+47.63 = M.H #14	78.23 377.40 = TP C 0.83	78.23 369.00 = F.L C 9.23
3+00		75.73 367.15 C 8.58

Tooley (Cont.)

STA:		GRADE
T.B.M.	391.98 =	40' E'ly 2x2 R.P. to NE Corn. Tooley & WEAVER
5+91.41 = Plug-end		413.39 405.30 C 8.09
5+50	18.44 ℄	405.10 397.66 C 7.44

1-9-61
Ref: 6347-D

DIPPER: M.H #11 (℄ 60th) E'ly to M.H #17 (Weaver)

STA:		grade:
P.O.T 2+00 = M.H #34	21.61 321.20 = TP. C 0.41	21.61 314.00 = F.L C 7.61
1+50		19.42 312.62 C 6.80
1+00	↓ 2.75% Stubs 5' RT.	319.19 311.25 C 7.94
0+50		20.55 309.87 C 10.68
0+00 = M.H #11 (℄ 60th See pg. 64)		320.72 308.50 (IN) C 12.22

T.B.M. 325.40 = 40' W'ly 2x2 R.P. to ℄ 60th & Dipper

Chk: T.B.M. 340.51 = 100' NW'ly Chx R.P. to W'ly Prop. B.C. Mon WEAVER

STA:		Grade:
3+75.16 = M.H #17 Stubs 6.75' & 12' RT on split (SW'ly QUAD)		41.56 329.20 (OUT) C 12.36 — 41.56 329.70 (IN) C 11.86 41.56 343.9 = TP m.H F 2.34
3+60 E.V.C		39.79 326.79 C 13.00
3+50		38.18 325.48 C 12.70
3+40 = B.V.C		36.81 324.45 C 12.36
(3+37.16 = Beg Con-Encase)		
3+00		31.02 321.47 C 9.55
2+50	↓ 7.47%	25.72 317.73 C 7.99

1-9-61 UPLAND: M.H #9 (℄ UPLAND + ℄ ESMT)

E'ly to Plug-end

STA:		grade:
2+19 = M.H #32	13.53 312.0 = Tp. M.H C1.53	313.53 300.70 C12.83
2+00		310.02 299.28 C10.74
1+50	7.39%	302.03 295.58 C6.45
1+00	stubs 5' rt.	97.21 291.89 C5.32
0+50		94.89 288.19 C6.70
0+00 = M.H #9 (= 2+96.45 ESMT see pg. 63)		94.16 284.50 (IN) C9.66
T.B.M.		296.77 = 60' N'W'ly 2x2 R.P. to ℄ ESMT ℄ UPLAND

STA:		grade
T.B.M		338.92 = Ch.□, SE'ly Corner CONC-LDG, house @ NW'ly WEAVER + UPLAND
3+42.15 = Plug-end		332.76 325.08 C7.68
3+00	19.80%	326.12 316.73 C9.39
2+50		318.37 306.84 C11.53

1-10-61

WEAVER: M.H #17 (& DIPPER)

S'ly to M.H # 20

STA:		grade:
0+45.67		46.58 341.40 C5.18
0+35.67		45.55 339.84 C5.71
0+25.67 (Beg Conc-encase)	Stubs 5' RT	44.19 337.66 C6.53
0+15.67		42.80 334.86 C7.94
0+05.67 = BVC	(NOT SET)	331.15
0+00 = M.H #17 (& DIPPER See pg 69)		41.56 329.20 (OUT) C12.36

T.B.M. 340.51 = 100 NW'ly Ch x R.P. to W'ly Prop. BC WEAVER

STA:		grade:	
2+00	1.033%	53.39 346.54 C6.83	
Δ = 5° 32' 15" RT 1+86.54 = M.H #18 Stubs 5.01' + 10' RT ON SPLIT		53.21 346.40 = F.L. C6.81	53.2 352.5 = TP C0.7
1+50		52.67 345.26 C7.41	
1+00	3.13%	50.79 343.70 C7.09	
0+65.67 = EVC		48.51 342.64 C5.87	
0+55.67 = end Con-Encase		47.65 342.33 C5.32	

WEAVER (E Dipper, S'ly - Cont.)

STA:	grade:
5+00	55.51 349.64 C5.87
4+50	55.06 349.12 C5.94
4+00	54.49 348.61 C5.88
3+50	53.95 348.10 C5.85
1.033 ft	
3+00	53.55 347.58 C5.97
2+50	53.12 347.06 C6.06

T.B.M. 338.92 = Chd SE'ly Corner Conc-Ldg. House at NW'ly Upland & WEAVER

STA:	grade
7+00	56.66 352.44 C4.22
6+50	55.63 351.70 C3.93
6+00	55.69 350.96 C4.73
1.48%	
5+50	56.03 350.22 C5.81

Δ = 27° 13' 13" RT

5+34.98 = M.H #19 — 56.13 / 350.00 = F.L / C6.13

Stubs 5.14' & 10' RT on split

56.13 / 356.1 = TP / CO-03

WEAVER

STA:		grade:
		59.83 360.55 = TP Fo. 72
8+45.53 = M.H #20 Stubs 5' + 10' RT		59.83 354.60 = F.L C 5.23
8+00	1.48 ↓	59.00 353.92 C 5.08
7+50		58.29 353.18 C 5.11

STA:	grade

1-11-61

WEAVER: M.H #17 (E Dipper) N'Ly to plug-end

STA: | grade:

T.B.M. 391.98 = 40 'E'Ly 2x2 RP. 74 to NE Corn, WEAVER & Tooley

STA: | grade:

2+80.59 = plug-end | 63.47 / 353.50 = F.L / C 9.97

1+50 | 45.93 / 334.08 / C 11.85

2+50 | 58.55 / 347.46 / C 11.09

2.925 @ Stubs 5' RT

19.78 @

1+00 | 41.52 / 332.62 / C 8.90

2+00 | 51.58 / 337.57 / C 14.01

0+50 | 40.81 / 331.16 / C 9.65

Δ = 36° 53' 26" RT

1+88.03 = M.H #16 | 50.27 / 350.05 = TP.M.H | 50.27 / 335.20 = F.L / C 0.22 / C 15.07

Stubs 5.27' + 10' RT.

0+00 = M.H #17 (E Dipper (See pg. 69)) | 41.56 / 329.70 (IN) / C 11.86

T.B.M. | 340.51 = 100 NW'Ly to W'Ly Prop. BC WEAVER | Ch x R.P.

1-25-61 REPUBLIC: M.H # 21 -

WEAVER ÷ to D-end.

STA:		Grade:
1+50		65.62 354.98 C 10.64
(1+44.4 = end Conc-encase)		
(1+24.4 = Beg Conc-encase)		
1+00		60.63 351.32 C 9.31
0+50	← 7.323 % stubs 6' RT ℄ upgrade	55.55 347.66 C 7.89
0+00 = M.H #21 (℄ WEAVER) See Pg 13	(EXIST. @ this Date)	353.60 344.00 (IN) C 9.60

T.B.M. 357.24 = S'ly 18.54' 2x2' R.P. to S'ly Prop. E.C Republic STA 29+72.60 (STreeT STA:)

REF: 6329-31-D
6350-D

STA:		grade:
4+00		81.64 373.15 C 8.49
3+50	7.22 % ←	79.33 369.54 C 9.79
3+00		75.94 365.93 C 10.01
Δ = 45° 51.5' LT 2+59.45 = M.H #35 stubs 6.50' & 12' RT ON split	71.78 373.30 Tp m.H F 1.52	71.78 363.00 = F.L C 8.78
2+50		71.39 362.23 C 9.16
2+00		68.62 358.64 C 9.98

Republic - CONT.

STA:			grade:
6+50			90.70 379.70 C11.00
6+00			88.60 379.33 C9.27
5+50	0.73% / 1.19% ↓		87.20 378.97 C8.23
5+00			85.50 378.60 C6.90
Δ = 46° 47.9' LT 4+72.63 = M.H #36 Stubs 6.54' + 12' RT ON SPLIT		85.2 384.30 = TP C0.9 M.H	85.21 378.40 = F.L C6.81
4+50	1.22% ↓		383.80 376.77 C7.03

T.B.M 378.88 = NAIL EUC. Tree = 28.51' s'ly fie to ℄ M.H #36

STA:			grade:
9+00			98.65 384.61 C14.04
8+50			97.51 383.50 C14.01
8+00			96.24 382.40 C13.84
7+50	2.21% ↓		94.95 381.29 C13.66
7+00			93.69 380.19 C13.50
Δ = 47° 13.2' LT 6+91.53 = M.H #37 Stubs 6.55' + 12' RT. ON SPLIT		93.21 392.52 = TP C0.69 M.H	93.21 380.00 = F.L C13.21

REPUBLIC - CONT.

STA:		grade:
11+50		413.82 400.00 C 13.82
11+00		410.20 396.77 C 13.43
10+50		405.65 393.54 C 12.11
10+00	6.46 OB	402.69 390.31 C 12.38
9+50		400.53 387.08 C 13.45

Δ = 7° 01.6' LT
9+17.80 = M.H #38
Stubs 6.01' & 12' RT
ON SPLIT

99.37
398.77 = TP
C 0.60 M.H

99.37
385.00 = F.L
C 14.37

T.B.M. 418.42 = 25' W'ly Chx = R.P. to W'ly Prop B.C @ Street
STA: 18+74.27 Republic

STA:		grade:
14+00		28.85 414.16 C 14.69
13+50		25.56 411.39 C 14.17
13+00	5.33 OB	22.52 408.61 C 13.91
12+50		19.92 405.84 C 14.08
12+00		16.88 403.06 C 13.82

Δ = 33° 22' RT.
11+81 = M.H #39
Stubs 6.26' & 12' RT
ON SPLIT

15.85
416.00 = TP
F 0.15 M.H

415.85
402.00 F.L
C 13.85

REPUBLIC – CONT.

STA: (IN 6 PTS. = 30.73 arcs) = Beg. Curve Sewer		grade:
TOT. Δ = 69° 43' 42" ℄ R. Sew = 147'	37.06	37.06
15+89.65 = M.H #41	436.35 = TP	423.00 F.L.
stubs 6' + 12' RT. @ 90°	Co. 71 M.H	C 14.06
15+50	35.73	
	421.18	
	C 14.55	
15+00	33.42	
	418.88	
	C 14.54	
14+50	31.11	
	416.59	
	C 14.52	
P.O.T		
14+15.21 = M.H #40	29.54	29.54
stubs 6' + 12' RT @ 90°	429.55 = TP grade	415.00 F.L.
	M.H	C 14.54

T.B.M 445.85 = NAIL Pole # P-371118 N'ly side Republic @ ST. STA: 12+55' ±

STA:	grade
Note: { IN CASE OFFSET STUB KNOCKED-OUT BY DALEY	
Chord FROM OFFSET STUB 17+43.30 TO OFFSET STUB @ 17+74.02 = 29.55'	
& DIST. OUT FROM CB ℄ AT N'LY (LT.) CB END = 20.3'	
17+74.02 = Plug-end	40.72
	427.00 = F.L.
DEF: 34° 51' 51"	C 13.72
ch = 30.64'	4'41.20
	4 27.00
	C 14.20
17+43.30	39.76
	426.33
DEF: = 29° 03' 12"	C 13.43
ch: 30.64'	
17+12.57	38.97
	425.66
DEF: = 23° 14' 34"	C 13.31
ch = 30.64'	
16+81.84	38.61
	425.00
DEF: = 17° 25' 55"	C 13.61
ch = 30.64'	
16+51.11	38.19
	424.33
def = 11° 37' 17"	C 13.86
Ch = 30.64'	
16+20.38	37.66
	423.67
def = 5° 59' 3"	C 13.99
ch = 30.64'	

Knocked out by Cont. (Reset)

STA:

(1

=Beg.

TOT. Δ=69

15+

stubs

@

15+

15+

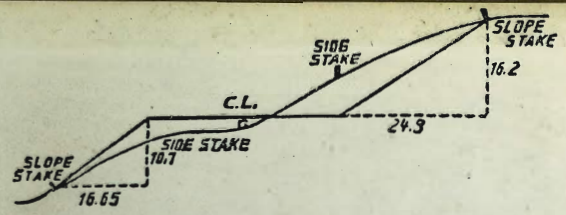
14+5

P.

14+

stubs

@9



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1½ TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05	4.20	4.35	2
3	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	3
4	6.00	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7.50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9.00	9.15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10.65	10.80	10.95	11.10	11.25	11.40	11.55	11.70	11.85	7
8	12.00	12.15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13.50	13.65	13.80	13.95	14.10	14.25	14.40	14.55	14.70	14.85	9
10	15.00	15.15	15.30	15.45	15.60	15.75	15.90	16.05	16.20	16.35	10
11	16.50	16.65	16.80	16.95	17.10	17.25	17.40	17.55	17.70	17.85	11
12	18.00	18.15	18.30	18.45	18.60	18.75	18.90	19.05	19.20	19.35	12
13	19.50	19.65	19.80	19.95	20.10	20.25	20.40	20.55	20.70	20.85	13
14	21.00	21.15	21.30	21.45	21.60	21.75	21.90	22.05	22.20	22.35	14
15	22.50	22.65	22.80	22.95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24.15	24.30	24.45	24.60	24.75	24.90	25.05	25.20	25.35	16
17	25.50	25.65	25.80	25.95	26.10	26.25	26.40	26.55	26.70	26.85	17
18	27.00	27.15	27.30	27.45	27.60	27.75	27.90	28.05	28.20	28.35	18
19	28.50	28.65	28.80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30.00	30.15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31.50	31.65	31.80	31.95	32.10	32.25	32.40	32.55	32.70	32.85	21
22	33.00	33.15	33.30	33.45	33.60	33.75	33.90	34.05	34.20	34.35	22
23	34.50	34.65	34.80	34.95	35.10	35.25	35.40	35.55	35.70	35.85	23
24	36.00	36.15	36.30	36.45	36.60	36.75	36.90	37.05	37.20	37.35	24
25	37.50	37.65	37.80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39.00	39.15	39.30	39.45	39.60	39.75	39.90	40.05	40.20	40.35	26
27	40.50	40.65	40.80	40.95	41.10	41.25	41.40	41.55	41.70	41.85	27
28	42.00	42.15	42.30	42.45	42.60	42.75	42.90	43.05	43.20	43.35	28
29	43.50	43.65	43.80	43.95	44.10	44.25	44.40	44.55	44.70	44.85	29
30	45.00	45.15	45.30	45.45	45.60	45.75	45.90	46.05	46.20	46.35	30
31	46.50	46.65	46.80	46.95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48.00	48.15	48.30	48.45	48.60	48.75	48.90	49.05	49.20	49.35	32
33	49.50	49.65	49.80	49.95	50.10	50.25	50.40	50.55	50.70	50.85	33
34	51.00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52.50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54.00	54.15	54.30	54.45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55.50	55.65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57.45	57.60	57.75	57.90	58.05	58.20	58.35	38
39	58.50	58.65	58.80	58.95	59.10	59.25	59.40	59.55	59.70	59.85	39
40	60.00	60.15	60.30	60.45	60.60	60.75	60.90	61.05	61.20	61.35	40
41	61.50	61.65	61.80	61.95	62.10	62.25	62.40	62.55	62.70	62.85	41
42	63.00	63.15	63.30	63.45	63.60	63.75	63.90	64.05	64.20	64.35	42
43	64.50	64.65	64.80	64.95	65.10	65.25	65.40	65.55	65.70	65.85	43
44	66.00	66.15	66.30	66.45	66.60	66.75	66.90	67.05	67.20	67.35	44
45	67.50	67.65	67.80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69.00	69.15	69.30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70.50	70.65	70.80	70.95	71.10	71.20	71.40	71.55	71.70	71.85	47
48	72.00	72.15	72.30	72.45	72.60	72.75	72.90	73.05	73.20	73.35	48
49	73.50	73.65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

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